

Mineral Industry Surveys

For information, contact:

Daniel Edelstein, Copper Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-4978, Fax: (703) 648-7757

E-mail: dedelste@usgs.gov

Michael Leahy (Data) Telephone: (703) 648-7964 Fax: (703) 648-7975 E-mail: mleahy@usgs.gov

Internet: http://minerals.usgs.gov/minerals

COPPER IN MAY 2005

Average daily mine production in May fell by about 1% compared with that of April, according to data compiled by the U.S. Geological Survey. Production increases in Arizona were more than offset by lower output in other States. In Utah, production at Kennecott Utah Copper Corp.'s Bingham Canyon Mine declined owing to an adjustment to the mine plan that, in order to take advantage of the strong market for molybdenum, maximized molybdenum production at the expense of copper production. In May, the Platts Metals Week average dealer price for molybdenum (molybdenum content of oxide) averaged about \$37 per pound, as compared with an average annual price of about \$5 per pound in 2003 and \$17 per pound in 2004. Average daily smelter production fell by about 28% in May owing to a planned maintenance shutdown at Kennecott's smelter (Rio Tinto plc, 2005). Down stream, average daily refinery production in May was essentially unchanged from that of April.

Mine production for the first 5 months of 2005 was 12% higher than that for the equivalent period of 2004. Total refined production, however, declined slightly, as much of the increased mine output was exported for smelting and refining. Stocks of refined copper continued to inch downward and at the end of May were down by about 23,000 metric tons (t), 17%, from their low level at yearend 2004.

Phelps Dodge Corp. announced that it will expend \$210 million to construct the first-ever commercial-scale copper concentrate leaching and direct electrowinning facility at its copper mine in Morenci, AZ. The facility will employ proprietary pressure leaching technology developed by Phelps Dodge and under demonstration at its copper mine in Bagdad, AZ, to process copper ores containing a mix of primary and secondary copper sulfide minerals. Restart of the idled Morenci concentrator is included in the cost and project development. The new concentrate leaching facilities will be incorporated into the existing leaching and electrowinning complex at Morenci.

The production from these facilities, slated for startup in 2007, will replace an expected decline in Morenci's heap leach output later in this decade. According to Phelps Dodge, the actions being taken at Morenci will affect plans for several other Phelps Dodge facilities in Arizona and New Mexico, including the Miami refinery in Arizona, the Chino smelter in New Mexico, and the Tyrone and Cobre mines in New Mexico. The affected assets were determined by Phelps Dodge to be "impaired." The currently idled Chino smelter and Miami refinery will be permanently closed. These long-lived assets and related supplies were written down from their total carrying value, \$442 million, by about \$420 million, or about \$321 million after taxes (Phelps Dodge Corp., 2005).

Update

Copper prices continued their upward trend, the COMEX spot price averaging \$1.62 per pound and \$1.63 per pound, respectively in June and July, surpassing the previous recordhigh monthly value of \$1.56 in December 1988. According to preliminary data released by the International Copper Study Group (2005) in July, consumption of refined copper for the first 4 months of 2005 exceeded production by about 150,000 t even though reported global stocks fell by only about 33,000 t over the same period.

References Cited

International Copper Study Group, 2005, Copper—Preliminary data for April 2004: Lisbon, Portugal, International Copper Study Group press release, July 14, 2005.

Phelps Dodge Corp., 2005, Phelps Dodge to construct first-ever commercial-scale copper concentrate leaching facility at Morenci Mine; will take \$420 million in non-cash special charges in second quarter: Phoenix, AZ, Phelps Dodge Corp. press release, June 2, 1 p.

Rio Tinto plc, 2005, Second quarter 2005 operations review: London, England, Rio Tinto plc news release, July 20, 10 p.

 $\label{table 1} {\sf TABLE~1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1

(Metric tons, unless otherwise specified)

				2005	
	Source				January -
	table ²	2004 ^p	April	May	May
Production:					
Primary:					
Mine, recoverable	(2)	1,160,000	101,000 ^r	103,000	499,000
Refinery:					
Electrolytic:					
Domestic and foreign	(4)	671,000	53,100 ^r	56,100	274,000
Electrowon	(4)	584,000	47,700	48,800	227,000
Total	(4)	1,260,000	101,000	105,000	501,000
Secondary recoverable copper:					
Refineries	(5)	50,800	4,150 ^r	3,750	20,900
Ingot makers ³	(5)	91,800	7,650	7,650	38,300
Brass and wire-rod mills	(5)	705,000	57,500	56,600	292,000
Foundries, etc. ³	(5)	65,200	5,430	5,430	27,200
Smelter, total	(3)	542,000	49,700	36,900	209,000
Consumption:					
Apparent	(8)	2,570,000	184,000	NA	NA
Refined (reported)	(7)	2,410,000	190,000	180,000	927,000
Purchased copper-base scrap	(9)	1,150,000	94,200 ^r	93,300	479,000
Stocks at end of period:					
Total refined	(11)	136,000	124,000	112,000	XX
Blister, etc.	(11)	51,400	42,500 ^r	38,200	XX
Prices:					
U.S. producer cathode (cents per pound) ⁴	(12)	133.938	154.606	153.256	152.795
Imports: ⁵					
Ores and concentrates ⁶	(14)	22,900		NA	NA
Refined	(14)	807,000	63,700	NA	NA
Exports: ⁵					
Ores and concentrates ⁶	(15)	24,200	15,900	NA	NA
Refined	(15)	118,000	1,900	NA	NA

^pPreliminary. ^rRevised. NA Not available. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

 $^{^2\}mbox{Numbers}$ in parentheses refer to the significant tables where these data are located.

 $^{^3\}mbox{Monthly}$ data and 2004 cumulative data estimated based on 2003 monthly average.

⁴Source: Platts Metals Week.

⁵Source: U.S. Census Bureau.

⁶Copper content.

TABLE 2 $\label{eq:mine_production} \mbox{MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES}^1$

	Rec	overable coppe	r		Contained copper	
Period	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total
2004: ^p						
January - May	287,000 ^r	159,000 ^r	446,000 ^r	238,000	214,000	452,000 ^r
May	56,800	34,100	90,900	49,100	42,900	92,000
June	59,200	33,500	92,800	49,400	44,600	94,100
July	62,000	38,100	100,000	50,700	50,900	102,000
August	62,800	36,200	99,000	49,300	51,200	100,000
September	62,800	36,400	99,200	49,800	50,800	101,000
October	64,200	39,400	104,000	48,900	56,300	105,000
November	61,400	46,500	108,000	47,600	62,100	110,000
December	63,300	45,200	109,000	50,000	60,300	110,000
Year	723,000	435,000	1,160,000	584,000	590,000	1,170,000
2005:						
January	58,500 r	39,800 ^r	98,300 ^r	42,400 ^r	57,600 ^r	99,900 ^r
February	54,200 ^r	37,500 ^r	91,700 ^r	40,800 ^r	52,400 ^r	93,100 ^r
March	62,100 ^r	43,200 ^r	105,000	47,400 ^r	59,600 ^r	107,000 ^r
April	62,000 ^r	39,200 ^r	101,000 r	47,700	55,100 ^r	103,000 ^r
May	65,300	37,700	103,000	48,800	55,900	105,000
January - May	302,000	197,000	499,000	227,000	281,000	508,000

^pPreliminary. ^rRevised.

 $\label{eq:table 3} \textbf{COPPER PRODUCED AT SMELTERS IN}$ THE UNITED STATES, BY $\textbf{SOURCE}^{1,2}$

(Metric tons, copper content)

production
production
208,000
52,900
46,500
46,500
51,300
48,000
49,200
42,300
49,900
542,000
42,700
36,100
44,000
49,700
36,900
209,000

^pPreliminary.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Includes production from, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

³Includes copper content of precipitates and other metal concentrates.

¹Includes blister, anode and copper from primary or secondary sources.

²Data are rounded to no more than three significant digits; may not add to total shown.

 $\label{eq:table 4} \textbf{TABLE 4}$ PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1

	Pri	mary materials			
	Electrolytically				Total
Period	refined ²	Electrowon	Total	Scrap	refined
2004: ^p					
January - May	269,000	238,000	507,000	21,000	528,000
May	55,600	49,100	105,000	4,150	109,000
June	58,900	49,400	108,000	4,460	113,000
July	49,200	50,700	99,900	4,080	104,000
August	53,400	49,300	103,000	3,870	107,000
September	57,700	49,800	108,000	4,660	112,000
October	57,400	48,900	106,000	4,540	111,000
November	56,700	47,600	104,000	4,190	109,000
December	69,300	50,000	119,000	4,010	123,000
Year	671,000	584,000	1,260,000	50,800	1,310,000
2005:					
January	54,900	42,400 ^r	97,200 ^r	4,380	102,000 ^r
February	57,400	40,800 ^r	98,100 ^r	4,380	102,000
March	52,600	47,400 ^r	100,000 ^r	4,210	104,000
April	53,100 ^r	47,700	101,000	4,160 ^r	105,000
May	56,100	48,800	105,000	3,750	109,000
January - May	274,000	227,000	501,000	20,900	522,000

^pPreliminary. ^rRevised.

 ${\it TABLE~5}$ COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1

(Metric tons, copper content)

	Refin	eries ²	Ingot m	akers ³	Brass and wi	ire-rod mills	Foundrie	es, etc. ³	
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total ⁴
2004: ^p									
January - May	6,680	14,300	6,970 ^r	31,300 ^r	289,000	17,100	10,300 ^r	16,900 ^r	393,000 r
May	1,340	2,820	1,390	6,260	54,600	3,090	2,060	3,370	74,900
June	1,340	3,120	1,390	6,260	55,900	2,910	2,060	3,370	76,300
July	1,340	2,740	1,390	6,260	56,400	2,440	2,060	3,370	76,000
August	1,340	2,540	1,390	6,260	56,800	2,450	2,060	3,370	76,200
September	1,340	3,320	1,390	6,260	55,200	2,690	2,060	3,370	75,600
October	1,340	3,210	1,390	6,260	56,800	2,670	2,060	3,370	77,100
November	1,340	2,850	1,390	6,260	50,500	2,670	2,060	3,370	70,500
December	1,340	2,680	1,390	6,260	48,000	3,300	2,060	3,370	68,400
Year	16,000	34,700	16,700	75,100	669,000	36,300	24,700	40,400	913,000
2005:									
January	1,340	3,050	1,390	6,260	57,700	2,780	2,060	3,370	77,900
February	1,340	3,040	1,390	6,260	54,900	3,110	2,060	3,370	75,500
March	1,340	2,870	1,390	6,260	56,300	2,980	2,060	3,370	76,500
April	1,340	2,820 r	1,390	6,260	54,200	3,220	2,060	3,370	74,700 ^r
May	1,340	2,410	1,390	6,260	54,100	2,550	2,060	3,370	73,400
January - May	6,680	14,200	6,970	31,300	277,000	14,600	10,300	16,900	378,000

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²From domestic and foreign source materials.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Electrolytically refined and fire-refined scrap based on source of material at smelter level.

³Monthly data and 2004 cumulative data estimated based on 2003 annual data.

⁴Does not include an estimate, based on reported 2003 data of 3,040 tons per month from new scrap and 1,830 tons per month of copper recovered from scrap other than copper-base.

 ${\bf TABLE~6}$ PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES 1

	Pro	duction	Ship	oments	Stocks, e	end of period
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2004: ^p						
January - May	595,000	781,000	600,000 ^r	774,000	XX	XX
May	115,000	160,000	116,000	148,000	51,400	29,600
June	118,000	143,000	117,000	148,000	52,700	23,900
July	118,000	143,000	117,000	144,000	54,100	23,900
August	119,000	162,000	118,000	156,000	54,700	29,500
September	113,000	154,000	113,000	148,000	54,500	35,600
October	120,000	135,000	120,000	148,000	54,400	23,000
November	107,000	148,000	108,000	144,000	52,900	26,600
December	100,000	134,000	97,600	130,000	55,300	31,200
Year	1,390,000	1,800,000	1,390,000	1,790,000	XX	XX
2005:	_					
January	113,000	141,000	114,000	137,000	55,100	35,100
February	109,000	135,000	110,000	134,000	53,300	35,100
March	117,000	135,000	117,000	149,000	53,600	20,600
April	109,000	143,000	112,000	141,000	50,200	22,000
May	111,000	145,000	112,000	143,000	49,100	23,400
January - May	559,000	698,000	565,000	706,000	XX	XX

^pPreliminary. ^rRevised. XX Not applicable.

TABLE 7 CONSUMPTION OF REFINED COPPER 1

(Metric tons)

	Brass	Wire-rod	Other	·
Period and item	mills	mills	plants ²	Total
2004: ^p			-	
January - May	250,000 ^r	775,000	25,800 ^r	1,050,000
May	45,300	156,000	5,160	207,000
June	46,000	136,000	5,160	187,000
July	50,900	142,000	5,160	198,000
August	48,500	165,000	5,160	218,000
September	46,100	151,000	5,160	202,000
October	48,200	136,000	5,160	190,000
November	44,700	145,000	5,160	195,000
December	39,200	129,000	5,160	173,000
Year	573,000	1,780,000	61,900	2,410,000
2005:				
January	44,900	145,000	5,160	195,000
February	42,500	129,000	5,160	177,000
March	46,100	134,000	5,160	185,000
April	41,500	143,000	5,160	190,000
May:				
Cathodes	30,300	132,000	881	163,000
Wire bars			(3)	(3)
Ingots and ingot bars	1,440		1,760	3,200
Cakes and slabs	(3)		(3)	(3)
Billets and other	11,300	W	2,510	13,800
Total	43,100	132,000	5,160	180,000
January - May	218,000	683,000	25,800	927,000

 $[^]p\mbox{Preliminary.}$ $^r\mbox{Revised.}$ W Withheld to avoid disclosing company proprietary data included with "Cathodes." -- Zero.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2003 annual data.

³Withheld to avoid disclosing company proprietary data; included with "Billets and others."

 $\label{eq:table 8} \textbf{U.S.} \ \textbf{APPARENT CONSUMPTION OF COPPER}^1$

Period	Refined copper production	Copper in old scrap ²	Refined general imports ³	Refined exports ³	Stock change during period	Apparent consumption
2004: ^p	T	ora serap	Importo	Chports	81	r
January - April	402,000	71,200 ^r	206,000 ^r	81,800	(326,000) r	923,000 ^r
April	107,000	17,300	54,100	28,400	(90,000)	240,000
May	105,000	17,300	56,300	3,700	(36,600)	211,000
June	108,000	17,400	40,400	2,720	(58,900)	222,000
July	99,900	16,600	75,600	5,470	(22,800)	209,000
August	103,000	16,400	65,500	9,350	(33,200)	208,000
September	108,000	17,400	73,800	570	(23,100)	221,000
October	106,000	17,300	60,200	3,890	(12,400)	192,000
November	104,000	16,900	75,300	2,460	(7,870)	202,000
December	119,000	17,400	51,100	8,390	(749)	180,000
Year	1,260,000	208,000	704,000	118,000	(521,000)	2,570,000
2005:						
January	97,200 ^r	17,200	77,900	4,460	6,290	182,000 ^r
February	98,100 ^r	17,600	66,500	3,230	(7,100)	186,000
March	100,000 ^r	17,300	72,000	2,830	(6,400)	193,000
April	101,000 ^r	17,400 ^r	63,300	1,900	(4,590) ^r	184,000
May	105,000	16,400	NA	NA	(11,500)	NA
January - April	396,000	69,500	280,000	12,400	(11,800)	745,000

^pPreliminary. ^rRevised. NA Not available.

 ${\bf TABLE~9} \\ {\bf CONSUMPTION~OF~PURCHASED~COPPER-BASE~SCRAP}^{\rm I}$

(Metric tons, gross weight)

	Sme	lters		_	Brass			_	
	and ref	ineries	Ingot m	akers ²	wire-roo	d mills ³	Foundrie	s, etc. ²	Total scrap
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2004: ^p									
January - May	6,750	14,300	9,260 ^r	45,500 ^r	363,000	17,600	18,000 ^r	18,500 ^r	493,000 ^r
May	1,350	2,770	1,850	9,110	68,500	3,200	3,600	3,700	94,100
June	1,350	3,150	1,850	9,110	70,900	3,040	3,600	3,700	96,700
July	1,350	2,760	1,850	9,110	71,100	2,620	3,600	3,700	96,100
August	1,350	2,550	1,850	9,110	72,600	2,580	3,600	3,700	97,400
September	1,350	3,290	1,850	9,110	70,300	2,820	3,600	3,700	96,000
October	1,350	3,230	1,850	9,110	71,500	2,810	3,600	3,700	97,200
November	1,350	2,890	1,850	9,110	63,300	2,780	3,600	3,700	88,500
December	1,350	2,700	1,850	9,110	60,300	3,440	3,600	3,700	86,000
Year	16,200	34,900	22,200	109,000	843,000	37,700	43,200	44,400	1,150,000
2005:									
January	1,350	3,080	1,850	9,110	72,400	2,910	3,600	3,700	98,000
February	1,350	3,080	1,850	9,110	69,800	3,280	3,600	3,700	95,800
March	1,350	2,900	1,850	9,110	71,800	3,170	3,600	3,700	97,500
April	1,350	2,850 ^r	1,850	9,110	68,400	3,370	3,600	3,700	94,200 ^r
May	1,350	2,440	1,850	9,110	68,500	2,710	3,600	3,700	93,300
January - May	6,750	14,400	9,260	45,500	351,000	15,400	18,000	18,500	479,000

Preliminary. Revised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2003 data.

³Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Monthly data and 2004 cumulative data estimated from 2003 annual data.

³Consumption at brass and wire-rod mills assumed equal to receipts.

 $\label{table 10} {\tt CONSUMPTION\ OF\ PURCHASED\ COPPER-BASE\ SCRAP^{1,\,2}}$

	2004 ^p			2	005	
Scrap type and processor	January - May	Year	March	April	May	January - May
No. 1 wire and heavy:						
Smelters and refiners	28,600 ^r	68,500 ^r	5,710 °	5,710 °	5,710	28,600
Brass and wire-rod mills	174,000	394,000	31,400	32,100	30,600	160,000
No. 2 mixed heavy and light:						
Smelters and refiners	10,900 ^r	26,800 ^r	2,230 °	2,170 °	1,770	11,000
Brass and wire-rod mills	3,380	6,250	488	411	487	2,360
Total unalloyed scrap:						
Smelters and refiners	39,500 ^r	95,300 ^r	7,940 ^r	7,880 ^r	7,480	39,500
Brass and wire-rod mills	177,000	401,000	31,900	32,500	31,100	162,000
Red brass: ³						
All plants	16,500 ^r	39,300 ^r	3,290 °	3,020 ^r	3,070	15,800
Leaded yellow brass:						
All plants	136,000 ^r	322,000 r	16,800 ^r	14,900 ^r	16,200	79,500
Yellow and low brass:						
All plants	17,300 ^r	41,300 ^r	15,700 °	14,200 ^r	13,800	73,800
Cartridge cases and brass:						
All plants	36,000 ^r	86,600	8,140 °	7,680	7,960	39,800
Auto radiators:						
Smelters and refiners	11,100	26,700 ^r	2,230 °	2,230 °	2,230	11,100
Bronzes:						
Smelters and refiners	3,500 ^r	8,390 ^r	699 ^r	699 ^r	699	3,500
Brass mills	2,770	6,350	342	601	508	2,300
Nickel-copper alloys:						
All plants	8,940 ^r	20,000	1,700	1,850	1,690	8,040
Low grade and residues:						
Smelters and refiners	5,250 ^r	12,600	1,050	1,050	1,050	5,250
Other alloy scrap: ⁴						
Smelters and refiners	460 ^r	1,100	92	92	92	460
Brass mills	3,390 ^r	4,860	452	355	359	2,000
Total alloyed scrap:						
Smelters and refiners	37,100 ^r	89,100 ^r	7,420 ^r	7,420 ^r	7,420	37,100
Brass mills	203,000	480,000	43,100	39,200	40,100	204,000
Total scrap:						
Smelters and refiners	76,600 ^r	184,000 ^r	15,400 °	15,300 °	14,900	76,600
Brass and wire-rod mills	380,000	880,000	75,000	71,800	71,200	366,000

^pPreliminary. ^rRevised.

¹Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 7,300 tons of scrap per month based on 2003 annual data; monthly data include estimates of about 11,000 tons of scrap per month consumed by ingot makers.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

⁴Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

 $\label{eq:table 11} \text{COPPER STOCKS AT END OF PERIOD}^1$

		Refined copper							
	Crude		Wire-rod					Total	
Period	copper ²	Refineries ³	$mills^3$	Brass mills ³	Other ⁴	Comex ⁵	LME^6	refined	
2004: ^p									
May	69,100	11,100	27,500	18,000	4,870	120,000	114,000	295,000	
June	60,600	5,680	26,600	19,600	4,870	86,300	92,800	236,000	
July	62,200	6,780	29,700	19,100	4,870	71,700	80,800	213,000	
August	65,700	8,640	21,400	22,600	4,870	55,900	66,400	180,000	
September	71,600	7,830	15,200	24,900	4,870	44,900	59,000	157,000	
October	72,200	9,210	25,200	20,300	4,870	41,300	43,400	144,000	
November	70,600	13,100	24,300	18,200	4,870	38,500	37,500	136,000	
December	51,400	10,300	20,300	21,500	4,870	43,700	35,000	136,000	
2005:									
January	66,100	12,300	24,300	24,000	4,870	41,600	34,900	142,000	
February	46,700	10,600	20,800	22,200	4,870	42,500	33,900	135,000	
March	48,600	6,920 ^r	25,000	20,900	4,870	39,300	31,500	128,000	
April	42,500 ^r	8,270 ^r	31,100	20,300	4,870	27,300	32,100	124,000	
May	38,200	9,750	30,200	19,200	4,870	20,200	28,200	112,000	

^pPreliminary. ^rRevised.

TABLE 12 AVERAGE PRICE OF COPPER IN THE UNITED STATES AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

II C producers	Comey	LME
•		
*.		cash price
cathode ¹	position ²	Grade A
126.097	120.968	123.960
126.008	120.862	121.832
132.078	126.812	127.342
133.015	127.752	129.064
136.680	131.414	131.283
140.273	135.007	136.575
146.599	141.333	141.620
150.897	145.631	142.633
133.938	128.972	129.958
150.261	144.995	143.751
151.905	146.639	147.544
153.946	148.680	153.268
154.606	149.340	153.938
153.256	147.990	147.331
152.795	147.529	149.166
	126.097 126.008 132.078 133.015 136.680 140.273 146.599 150.897 133.938 150.261 151.905 153.946 154.606 153.256	delivered price cathode position positi

¹Listed as "U.S. producer cathode."

Sources: Platts Metals Week and American Metal Market.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Copper content of blister and other materials in transit and in process of refining.

³Stocks of refined copper as reported; no estimates are made for nonrespondents.

⁴Monthly estimates based on reported and 2003 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

⁵Commodity Exchange Inc., New York.

⁶London Metal Exchange Ltd., U.S. warehouses.

²Listed as "Comex high grade first position."

 ${\it TABLE~13}$ NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealers (New York)
				Red brass
	Brass mills	Refiners	No. 2	turnings and
Month	No. 1 scrap	No. 2 scrap	Scrap	borings
2004:				
May	119.65	96.28	89.00	55.00
June	119.82	96.55	89.00	55.00
July	125.52	101.33	89.00	55.00
August	126.64	101.73	89.00	55.00
September	127.29	106.19	89.00	55.00
October	130.43	113.38	89.00	55.00
November	135.40	118.15	89.00	55.00
December	139.14	121.00	89.00	55.00
Year	126.41	107.62	86.86	55.14
2005:				
January	139.40	119.50	89.00	55.00
February	139.89	121.67	89.00	55.00
March	142.52	123.43	89.00	55.00
April	143.52	126.00	89.00	55.00
May	138.24	124.76	89.00	55.00
January - May	140.71	123.07	89.00	55.00

rRevised.

Source: American Metal Market.

 ${\it TABLE~14}$ U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1

(Metric tons, copper content)

	Ore and concentrate			Matte, as	Matte, ash and precipitates			Blister and anodes			Refined		
		20	05		2005 January -		2005				2005		
Country or			January -					January -			January -		
territory	2004	April	April	2004	April	April	2004	April	April	2004	April	April	
Brazil									10	15,600		8,980	
Canada	516			99	25	39	75,500	6,240	29,000	278,000	24,600	97,700	
Chile							48,900	3,240	13,300	311,000	22,800	105,000	
Germany										21,000	1,750	9,780	
Japan				(2)			19		(2)	4,380	380	1,590	
Kazakhstan												1,280	
Mexico	22,400			206	3	37	8,630		1,450	19,300	3,790	20,800	
Namibia							7,710						
Peru							10,200			152,000	10,400	45,900	
Taiwan				1,330	129	398				(2)			
Other				45	73	125	16			6,120	1	569	
Total	22,900			1,680	230	599	151,000	9,480	43,700	807,000	63,700	291,000	

⁻⁻ Zero.

Source: U.S. Census Bureau.

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¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

 ${\it TABLE~15}$ U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY ${\it CLASS}^1$

(Metric tons, copper content)

	Ore and concentrate			Matte, asl	Matte, ash and precipitates			ter and anode	s	Refined		
		2005 January -			2005 January -			2005 January -			2005	
Country or												January -
territory	2004	April	April	2004	April	April	2004	April	April	2004	April	April
Belgium	6		39	45		37	1,320	78	659	998		49
Canada	18,200	660	6,250	18,800	1,280	6,990	22,400	2,170	7,820	2,230	231	1,080
China	2,340	10,600	20,300	52	426	2,320	307		121	23,900	1,420	3,910
Costa Rica			3							1,300	1	1
Germany	32			23	(2)	15	1,880	100	329	70	2	113
Hong Kong	229	2	2	12		1	3,410	245	975	11		
India	56		149	21		1	164	1	27	2,940	201	2,150
Italy					18	18	1,570		1,510	21,100	1	14
Japan	2,510		4,620	122		65	705	160	748	66	5	5
Korea, Republic of	23		1	8			8,910	36	136	5,060		75
Mexico	115	3,070	5,230	2,650	21	380	221	60	138	20,500	29	4,800
Netherlands				37						1,280		(2)
Saudi Arabia									11	7,840		
Taiwan	109			5			1,320	140	539	29,000		4
United Arab Emirates	5			5			669		64			
United Kingdom	37		21	87	17	33	474	42	99	590	5	45
Other	577	1,540	1,600	226	11	34	3,080	340	1,390	1,370	8	165
Total	24,200	15,900	38,200	22,100	1,770	9,900	46,400	3,370	14,600	118,000	1,900	12,400

⁻⁻ Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

 $\label{eq:table 16} \text{U.S. COPPER SCRAP IMPORTS}^1$

		Unalloyed		Alloyed				
		20	05		2005			
Country or			January-	•		January- April		
territory	2004	April	April	2004	April			
Canada	6,370	637	2,330	44,500	3,700	15,800		
China	1			448		19		
Costa Rica	1,400	134	557	516	34	95		
Dominican Republic	446		64	432	14	193		
Germany	48		6	1,130				
Guatemala	271		37	1,050	107	447		
Honduras	1,430	83	700	625	51	174		
Hong Kong	1							
India					20	102		
Japan	65	4	15	145		82		
Korea, Republic of				7				
Malaysia				231		108		
Mexico	10,300	1,030	3,280	22,100	1,880	7,900		
Taiwan				1,480	17	70		
United Kingdom	554		89	1,030	18	140		
Other	2,550	146	795	4,570	1,260	2,740		
Total	23,400	2,030	7,870	78,300	7,100	27,800		

⁻⁻ Zero.

Source: U.S. Census Bureau.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

TABLE 17
U.S. COPPER SCRAP EXPORTS¹

			Unallo	yed	Alloyed							
				2005		2005						
		No. 1		No. 2		Other			Segregated		Unsegregated	
Country or			January-		January-		January-		January-		January-	
territory	2004	April	April	April	April	April	April	2004	April	April	April	April
Bangladesh										2,790		
Belgium	3,850					20	216	8,200	91	391		
Canada	33,300					2,340	9,660	15,000	311	1,270		
China	222,000	7,400	24,100	10,600	36,300	5,400	15,300	239,000	9,940	33,100	6,440	21,600
Germany	8,830	123	404		320	418	3,030	13,800	58	981	802	2,910
Hong Kong	3,910	464	1,320	265	61	65	155	11,000	316	1,580	997	3,110
India	4,160	38	164		182	304	1,320	45,100	1,580	6,300	118	469
Japan	7,930	21	21	4	530	427	2,060	9,660	351	2,140	201	777
Korea, Republic of	22,400	529	2,050	723	3,310	968	3,740	16,300	1,310	4,340		1,250
Mexico	4,560	15	207		200	22	176	1,570	20	95	31	124
Spain	37	(2)	2	39	116		2	2,740	97	97	99	811
Taiwan	11,300		70	774	2,250	167	958	13,700	771	2,600		573
Thailand						40	159	1,250	20	254		
United Kingdom	34					31	88	4,560	29	63	527	1,280
Other	2,990	1	17	27	611	17	294	7,210	201	635	1,340	5,450
Total	325,000	8,590	28,400	12,400	43,900	10,200	37,200	389,000	15,100	56,600	10,500	38,400

⁻⁻ Zero.

Source: U.S. Census Bureau.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.